



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
087949,850	10/14/97	SOLANKI	356952000100

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EXAMINER
NGO.H

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 03/29/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/949,850

Applicant(s)

Solanki et al

Examiner

Hung V Ngo

Group Art Unit

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☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 23-44 is/are pending in the application.

Of the above, claim(s) 36-44 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 23-35 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Election/Restriction

Applicant's election with traverse of claims 23-35 in Paper No. 21 is acknowledged. The traversal is on the ground(s) that the office does not provide any reasoning as to why restriction was proper and examine both groups of claims do not place an undue burden on the examiner. This is not found persuasive because in the restriction, the examiner pointed out two different species (Species I, Figures 1 and 2; Species II, Figs 5a-5c) and examining both groups of claims would place an undue burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

Claims 24, 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24, line 2, "the metal lead" lacks antecedent basis.

Claim 29, line 1, "the metal lead" lacks antecedent basis.

Claim 30 is included because of its dependency.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (US 4, 655, 088) in view of Takahashi et al

Adams discloses a housing (10) formed of a polymer material (col 1, line 55-60) having walls (12) (re claims 32, 33), a chamber, a cap (24) and a vent hole (25, 14), multiple leads (13) being partially exposed with the chamber (re claim 30), a wire (23) (re claim 25) (re claim 27), a pressure transducer (20), and recites "the portion of leads 13 which penetrate into the area where semiconductor die 20 is mounted is preferably covered with a passivation material as is semiconductor die 20 in order to protect the lead frames and the die from moisture, and other environmental components" (col 2, lines 20-26), wherein this meets the limitation of "the chamber is filled with a pressure transfer medium" (re claims 26), but do not disclose a metal base (re claim 23) formed^{ing} a ground lead (re claims 24, 29), and the walls extended about the base to expose only a portion of the base (re claim 28), the pressure transfer medium comprising silicone

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gel (re claim 31), molding a polymer housing and heating the lead having the downset portion (re claims 34, 35).

Takahashi et al disclose a metal base (7) of a lead frame for supporting a pressure transducer (col 3, lines 44-45) and the walls extended about the base to expose only a portion of the base (Fig 7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the exposed metal base with the housing of Adams for the purpose of supporting the pressure transducer as taught by Takahashi et al.

It is a common practice in the electrical art to connect the metal base to a ground lead. It would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the metal base to the ground lead of the modified Adams for the purpose of providing a ground terminal for connecting the transducer to external ground.

Silicone gel is a well known pressure transfer medium or encapsulating material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Silicone gel for the pressure transfer medium of Adams, since Silicone gel is known pressure transfer medium the substitution would not alter the function of the package of Adams

The limitations of molding a polymer housing and heating the lead having the downset portion have been considered. However, the presence of process limitations in product claims, which product does not otherwise patentably distinguish over prior art, cannot impart patentability to that product. In re Stephens 145 USPQ 656 (CCPA 1965).

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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung V. Ngo whose telephone number is (703) 308-7614. The examiner can normally be reached on Monday to Friday from 8:00 am to 05:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax phone number for this Group is (703) 305-3431 or (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

Kristine Kincaid
Kristine Kincaid
Supervisory Patent Examiner
Technology Center 2800

HVN

March 29, 1999